Date: Tue, 9 Nov 93 04:30:21 PST
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #105
To: Ham-Ant

Ham-Ant Digest   Tue, 9 Nov 93   Volume 93 : Issue 105

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 8 Nov 93 18:40:54 GMT
From: ogicse!uwm.edu!math.ohio-state.edu!news.acns.nwu.edu!elvex7.acns.nwu.edu!
user@network.ucsd.edu
Subject: Diamond Dual Band Antennas
To: ham-ant@ucsd.edu

I'm looking to purchase a dual band mobil antenna, a minimum of 5/8 wave on the 2m side. Diamond manufactures several of significant size(i.e. 57 inches or larger) with UHF mounts(SO-239 & PL259). Given the size of the antenna and anticipated wind load can I expect to see problems with the mount cracking or breaking off? In addition, Diamond's SG & NR series dual band mobile antennas reportedly need no grounding. Is this possible or even suggested with a 5/8 wave. I'm looking specifically at the SG7900 or the NR-790A. Any recommendations pertaining to these antennas would be appreciated.
BTW.... What size ground plane does a 5/8 normally need?

Date: 8 Nov 93 01:56:43 GMT
From: psinntp!gdc!esun223!kurdzo@uunet.uu.net
Subject: GAP Eagle DX-VI Problems
To: ham-ant@ucsd.edu

Recently I purchased a GAP Eagle DX-VI vertical HF antenna. The 10, 12, and 15 meter bands give very good SWR readings. However, I'm having problems with 17, 20, and 40. All three bands have unacceptably high SWR readings. On 40, the GAP seems to resonate up near the top of the band (rather than in the middle). On 20 and 17, the SWR doesn't seem to vary much with frequency.

I have called the guys at GAP three times now. They have given me many suggestions, but none of them have worked. I've tried the antenna on the ground as well as on my roof. I've tried 3 different types (and lengths) of coax. The antenna appears to work better on the ground, by the way. There are no large metal objects nearby. They keep telling me "If it's assembled correctly, and nothing nearby is coupling to it, it will work".

Has anyone else out there bought one of these and got it to work? Does anyone know the theory behind this antenna? There is a capacitor at the top of the antenna. The guy at GAP said this cap could be changed to change the center of 40m coverage. Has anyone else had to do this?

Please share any of your GAP experiences (good OR bad) with me.

Thanks,

--

Jim Kurdzo AA1GZ
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kurdzo@gdc.com

Date: 8 Nov 1993 09:31:36 -0800
From: cs.utexas.edu!asuvax!chnews!ornews.intel.com!ornews.intel.com!not-for-mail@uunet.uu.net
Subject: IsoPole Antennas
To: ham-ant@ucsd.edu

In article <2bep2c$lru@crcnis1.unl.edu> mcduffie@unlinfo.unl.edu (Gary McDuffie Sr) writes:
>Greg Law <GREGL@delphi.com> writes:
>>I've been considering either a Ringo Ranger or an IsoPole and I've been hearing
>>that the IsoPole is much better due to its lower angle of radiation.

>The Ringo and IsoPole are probably about even, however I have not
>compared them side by side.

I currently have a Ringo Ranger and an Isopole mounted atop separate 60' Cedar trees fed with similar lengths of RG-213. The Ringo has been up for about 3 years and the Isopole was installed this past summer. They both exhibit low SWR at the 2 meter band center (1.2:1 or less) on the feed line and each showed low swr with a short cable before I installed them on the tree tops. The Ringo has a homebrew Ringo Ranger II kit on it that apparently has no effect compared to previous use without it. Both were used antennas purchased a swap meets for $20 or less and have had all the fittings replace with stainless steel hardware as well as Penetrox applied to all aluminum joints and sleeves. Strong gusty winter winds have whipped the Ringo for 3 years now with no problems. I need to do more testing but I've done some signal strength tests across the band with local stations 5-10 miles distant. The winner is:

Ringo Ranger

The Ringo exhibited a fairly even signal strength from 144.5 up to 147.9 while the Isopole signal drops off sharply at about 1/2 Mhz on either side of center freq. (146.50). Both show good swr figures out to band edges where they are approx. 2:1 on my 100' cables. But the pattern varies drastically with the Isopole apparently. At band center the signal strength is similar although the Ringo is slightly stronger.
I've modeled both these antennas with the MN program. The Isopole appears to be the equivalent of the old double extended zepp in a sleeve dipole variation. The Ringo is an end fed, gamma ring-matched 1/2 wave(?) with 5/8 wave collinear top section matched with a 1/8 wave hairpin that the birds like to sit on.
I also have performance comparison experience with the original AR-2 Ringo and a simple 1/4 wave ground plane with sloping radials. The AR-2 is not the dummy load that many think and performed considerably better than the ground plane antenna. Feedline radiation doesn't seem to be the big deal some think it is because otherwise my Ringo Ranger-to-Ranger II conversion would have shown an improvement and the Ringos work well in general when properly assembled and tuned. Tuning them seems to be a problem for some folks however.
I'm not stating performance figures as all my measurements are relative and the radios used have relative meters in them as well.

>For the bucks, the Isopole is poor.

This is true. The Isopole is rather overpriced but then so are most
of the other these days. Comet and Diamond seem to be particularly
golden.

>There are LOTS of happy IsoPole users out there. I have never figured
>out why they are happy, but, many people swear by them. By the way, I
>have heard from many that the UHF version works very well and is of much
>better construction.

I had a 440 Isopole which was used for a repeater antenna at my location
for a while. A 4 bay Cushcraft collinear array of dipoles was later
installed in the same location (on the 60' tree top) and performed better
than the Isopole but not a whole lot better. The big problem with the
440 Isopole is the construction which is much different and seems a lot
less rugged than the 2 meter version. The rods are threaded together
with weak aluminum joints and the center matching coil inside some Teflon
or white Nylon was very troublesome for me. The coil wire inside is not
well connected to either end. The soldered coil tap is hard to connect
as well. The whole center coil section is difficult to work on and
mechanically unsound in my opinion. But I did get it to work.

I don't know why the Isopole has such a good reputation but I'll guess
that its easy to assemble and tune correctly. It shows good swr figures
and this is probably the only parameter that many folks have measured.
Of course one or both of my antennas may be all out of whack but these
are my observations for what its worth.

--
zardoz@ornews.intel.com WA7LDV

Date: Mon, 08 Nov 1993 10:19:06 -0700
From: orca.es.com!cnn.sim.es.com!msanders.sim.es.com!user@uunet.uu.net
Subject: stubby HT antenna
To: ham-ant@ucsd.edu

In article <CG17AK.9yK@cbnewsm.cb.att.com>, hellman@cbnewsm.cb.att.com
(eric.s.hellman) wrote:

> >
> A
> > >
> >
> > Our local "guru" says that the best accessory for a 2M HT with a rubber
> > attenuator is a 9000 foot mountain.

> >
> > ==========
>
> I've done just fine with a 4000 ft mtn, thank you. I agree
> it's not how big your antenna is, it's how high!
> Shel WA2UBK dara@physics.att.com

--

Sorry, I live in Utah where we have 9,000 & 10,000 ft mountains.

Milt

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Opinions, thoughts, &cetera are my own (when I can remember them).

KB7MSF

Date: 8 Nov 93 23:25:13 GMT
From: ogicse!hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu
Subject: SWR measurements are too good!
To: ham-ant@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: Note that SWR only has meaning *on a transmission line*, so measuring
: SWR at the load is not measuring SWR at all. It's using the meter's
: internal construction as a means of determining a ratio indicating the
: mismatch of the antenna with respect to the *meter's* characteristic
: impedance. While this can amount to the same thing in practice,
: conceptually it's entirely different. Standing waves require a transmission
: line to "stand" on.

Similarly, if you measure SWR with a meter which is calibrated to an
impedance different than the line you are trying to measure, the
measurement will not be accurate. Someone in another thread mentioned
some "RG-58" type cable he got that measured 60+ ohms; if you
measure a 1:1 SWR on that line with a 50 ohm meter, guess what--you
will be somewhat in error. It may not really matter much: if the
reason you are trying to get a 1:1 match at 50 ohms is so your
transmitter will be happy with the load, you've succeeded, perhaps
better than if the SWR on the actual line were 1:1.

Date: 7 Nov 93 16:24:02 GMT
From: news-mail-gateway@ucsd.edu
Subject: W1JR Speaks in Boston
To: ham-ant@ucsd.edu

For those interested in the Boston area, I post the following:

Joe Reisert, W1JR, former chief engineer at Cuscraft Corp., will be the guest speaker at November's General Meeting of the Boston Amateur Radio Club. Joe now runs his own antenna company. He'll also be available to answer your questions.

The meeting will be held Wednesday evening, November 17th at 7:30, at the Lotus Development Corp. Auditorium. The site is "T" accessible, and parking is also available.

For more info, please contact Ed Hennessy, N1PBA, at:

N1PBA@ace.com or ehenness@natick-emh1.army.mil

Date: 8 Nov 93 15:05:48 GMT
From: news-mail-gateway@ucsd.edu
Subject: Want antenna outdoors
To: ham-ant@ucsd.edu

Brant Wehr N0UTT (bwehr@iastate.edu) writes:

>Go a small problem. I am a student at Iowa State and the housing office does
>not allow any antenna outdoors. I want something outside and covering 2/440.
>Right now I am running a 2m 3 element beam hanging on the wall. If anyone has
>any home built ideas let me know..

Brant-- You may not have a choice if Iowa State says you cannot have any antennas outside. But all's not lost...

You can build yourself a 2m J antenna out of twin lead and tape it to the window (or on the outside face of the window would be better). The 2m J should be resonant on 440 so it can serve as a dual band antenna. I've seen a guy at a local swap meet (local to me here in Northern CA, that is) that sells a 2m/440 MHz twin-lead J.

Does your dorm/college housing have central heating/air or is it done through a swamp cooler/heater stuck in the wall? If it's the latter, is the rear of the swamp cooler sticking its rear to the outside world? In my apartment, for example, there's enough of the swamp cooler sticking out to the world to allow me to plunk down a magnet mount dual-band antenna and run the coax through the

window. Of course, I do this after the sun goes down to keep the apartment manager and neighbors out of my hair (what's left of it...). As a backup (or when the weather is too cold to have the window cracked open), I have a twin lead J hanging from ceiling.

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This message does not reflect the interests and opinions of cc:Mail or Lotus.
After all, I did tell them I liked Microsoft Excel and I still got the job.

Date: 5 Nov 93 21:21:31 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!
cyber2.cyberstore.ca!nntp.cs.ubc.ca!alberta!atha!aupair.cs.athabascau.ca!
rwa@network.ucsd.edu
To: ham-ant@ucsd.edu

References <mbuttsCFvnAt.9zs@netcom.com>, <2b8tip$lhl@wrdis02.robins.af.mil>,
<1993Nov5.165112.9496@infonode.ingr.com>aupa
Subject : Re: Archery Advice for Antenna Raising

rvhoeft@npmo.pc.ingr.com (Roger V Hoeft) writes:

>But has anyone ever tried the ol' golf ball and eye screw technique??

I would have used a nine-iron. Or maybe a chipping wedge :).

regards,
Ross ve6pdq
--
Ross Alexander,rwa@cs.athabascau.ca,(403) 675 6311,ve6pdq@nebulus.ampr.ab.ca
    "Arguably worse, the compiler can produce any result it deems fit, up
       to and including the start of World War III (assuming the right
           optional hardware has been installed)." -- Fortran FAQ

End of Ham-Ant Digest V93 #105
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